

Notice of Allowability

Application No.

10/072,923

Examiner

Monique M Wills

Applicant(s)

HO-JIN ET AL.

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 8/4/04.
2. ☒ The allowed claim(s) is/are 1.4-6.8-10.12-25 & 27-28.
3. ☒ The drawings filed on 12 February 2002 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: claims 1, 4-6, 8-10, 12-16, 23, 25 & 27-28 are allowable over the prior art of record, because the prior art is silent to a positive active material coated on a current collector, wherein the positive active material is surface treated with a hydroxide, oxyhydroxide, oxycarbonate or hydroxycarbonate, and the surface-treatment layer does not include lithium.

Claim 24 is allowable over the prior art of record, because the prior art is silent to a LiCoO_2 positive active material coated with a hydroxide, oxyhydroxide, oxycarbonate or hydroxycarbonate of Al or B.

The prior art of record, such as Amatucci U.S. Patent 5, 705,291, teaches an active material coated with lithium hydroxide. The instant claims are patentably distinct from Amatucci, because the claims specifically exclude lithium as a surface treatment material.

Claims 17-22 are allowable over the prior art of record, because the prior art is silent to a method of preparing a positive electrode comprising coating a current collector with a positive active material composition to form a positive active material layer comprising one of lithium chalcogenide, lithium-cobalt chalcogenide, lithium-manganese chalcogenide, lithium-nickel chalcogenide and lithium-nickel-manganese chalcogenide, dipping the current collector having the positive active material layer in a liquid comprising Al or B.

The prior art of record, such as Amatucci U.S. Patent 5, 705,291, teaches coating LiMn_2O_4 particulates with a thin film to reduce contact between an electrolyte and a surface of the LiMn_2O_4 (lithium-manganese chalcogenide). The reference does not teach or suggest that the lithium-manganese chalcogenide particulate is coated on the current collector, and the coated current collector is coated with an aluminum or borate film.

CONCLUSION

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Monique Wills whose telephone number is (571) 272-1309. The Examiner can normally be reached on Monday-Friday from 8:30am to 5:00 pm.

If attempts to reach Examiner by telephone are unsuccessful, the Examiner's supervisor, Michael Barr, may be reached at 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MW

08/20/04


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